

Fig. 1B

Fig. 1A

Fig. 1C

**con**

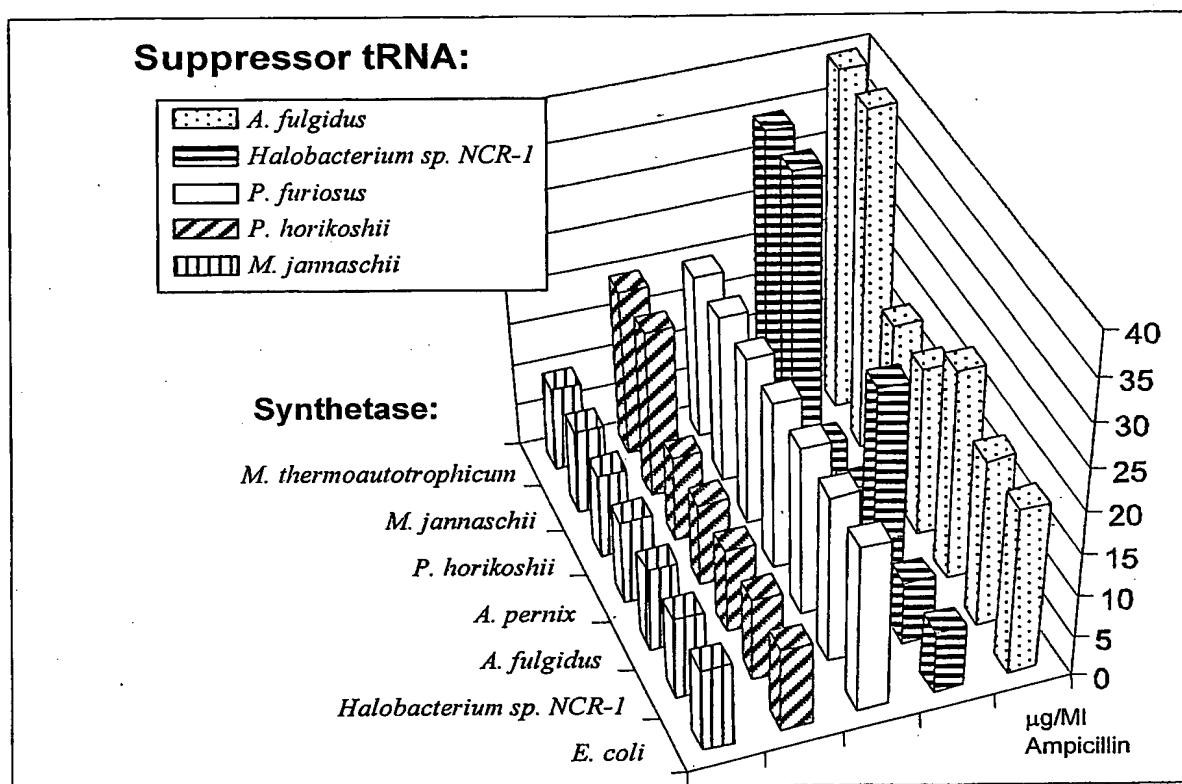


Fig. 2

Fig. 3A

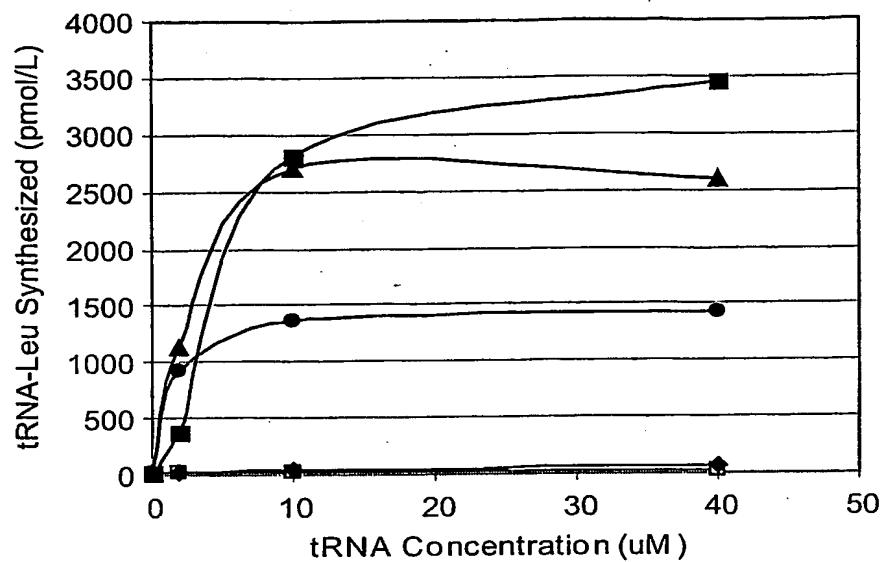


Fig. 3B

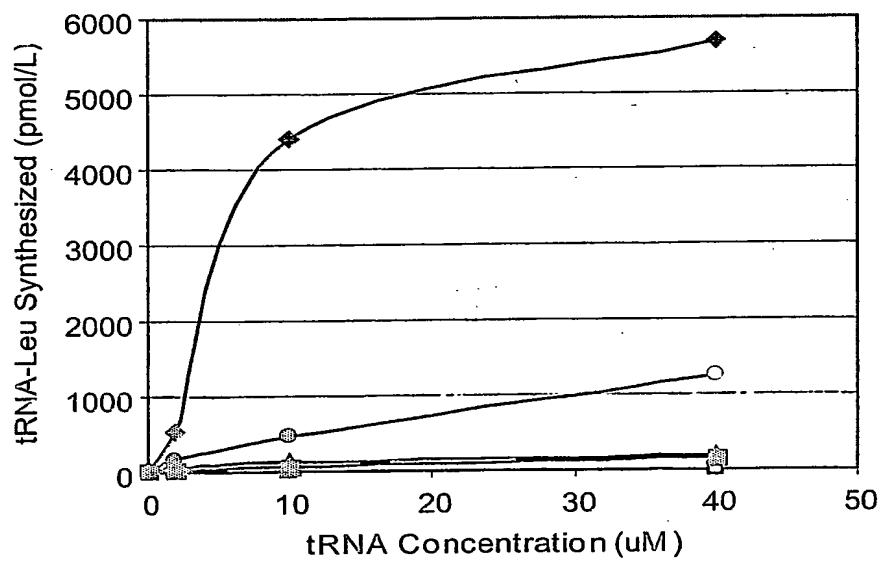


Fig. 4A

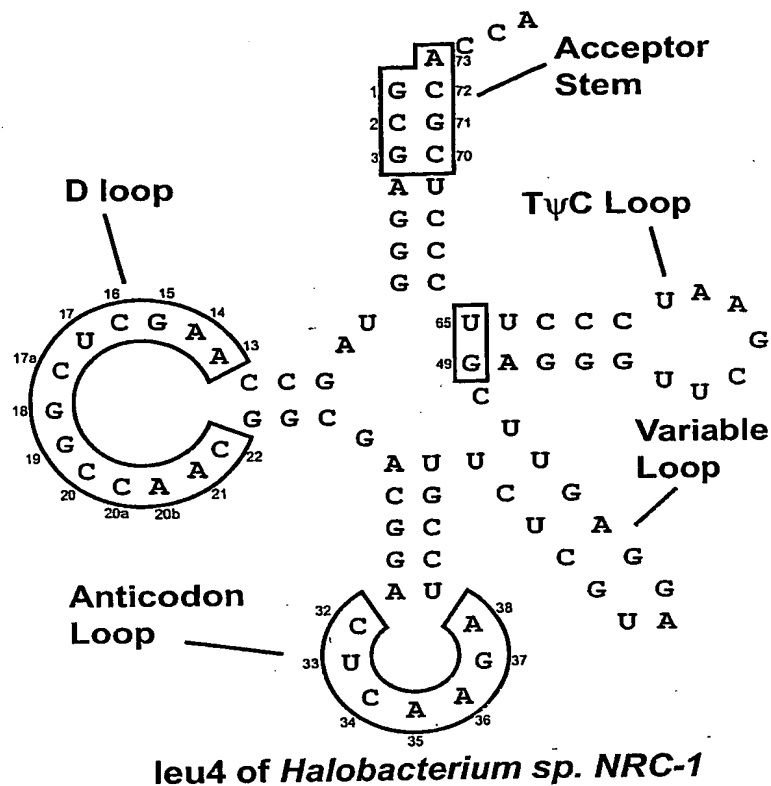
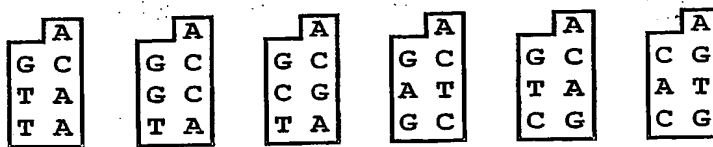


Fig. 4B

**Active acceptor stem mutants:**



**Less cross reactive mutants:**

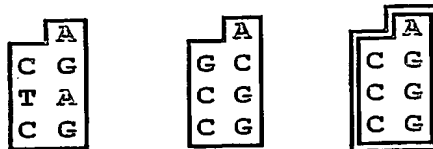


Fig. 5